I. INTRODUCTION

Job Corps plays a central role in federal efforts to provide employment assistance to disadvantaged youths. The program's goal is to help disadvantaged youths become "more responsible, employable, and productive citizens" by providing them with comprehensive services that include basic education, vocational skills training, counseling, and residential support. Each year, Job Corps serves more than 60,000 new enrollees and costs more than \$1 billion. The National Job Corps Study, funded by the U.S. Department of Labor (DOL), was designed to provide information about the effectiveness of Job Corps in attaining its goal.¹

The study consists of three major components: (1) an impact analysis, (2) a process analysis, and (3) a benefit-cost analysis. This report presents the results of the process analysis, which describes the key elements of the Job Corps program model and documents how they were implemented at the time the study was conducted. The process analysis provides important contextual information that will complement the impact and benefit-cost analyses and support efforts to improve Job Corps operations. Moreover, some of the data collected for the process study will be used directly in the impact and benefit-cost analyses. In addition to meeting these basic study objectives, the information about the strengths and weaknesses in Job Corps operations will be useful to the Job Corps community and to others operating programs that provide education and training for disadvantaged out-of-school youth.

¹The study is being conducted by Mathematica Policy Research, Inc. (MPR) and its subcontractors, Battelle Memorial Institute and Decision Information Resources.

A. OVERVIEW OF JOB CORPS

The Job Corps program, established by the Economic Opportunity Act of 1964, currently operates under provisions of the Job Training Partnership Act (JTPA) of 1982. The operational structure of Job Corps is complex, with multiple levels of administrative accountability, several distinct program components, and numerous contractors and subcontractors. DOL administers Job Corps through a national office and nine regional offices. The national office establishes policy and requirements, develops curricula, and oversees major program initiatives. The regional offices procure and administer contracts and perform oversight activities, such as reviews of center performance.

Through its regional offices, DOL uses a competitive bidding process to contract out center operations, recruiting and screening of new students, and placement of students into jobs and other educational opportunities after they leave the program. At the time of the study, 80 centers were operated under such contracts. In addition, the U.S. Departments of Agriculture and of the Interior operated 30 centers, called Civilian Conservation Centers (CCCs), under interagency agreements with DOL.² Next, we briefly outline the roles of the three main program elements.

1. Outreach and Admissions

Recruitment and screening for Job Corps are conducted by outreach and admissions (OA) agencies, which include private nonprofit firms, private for-profit firms, state employment agencies, and the centers themselves. These agencies provide information to the public through outreach activities (for example, by placing advertisements and making presentations at schools), screen

²Currently, 88 contract centers and 28 CCCs are providing Job Corps training.

youths to ensure that they meet the eligibility criteria, assign youths to centers (when the regional office delegates this function), and arrange for transportation to centers.

2. Job Corps Center Services

Job Corps is a comprehensive and intensive program. Its major components include basic education, vocational training, residential living (including training in social skills), health care and education, counseling, and job placement assistance. Services in each of these components are tailored to each participant.

Education. The goal of the education component is to enable students to learn as fast as their individual abilities permit. Education programs in Job Corps are individualized and self-paced and operate on an open-entry and open-exit basis. The programs include remedial education (emphasizing reading and mathematics), world of work (including consumer education), driver education, home and family living, health education, programs designed for those whose primary language is not English, and a General Educational Development (GED) program of high school equivalency for students who are academically qualified. About one-fourth of the centers can grant state-recognized high school diplomas.

Vocational Training. As with the education component, the vocational training programs at Job Corps are individualized and self-paced and operate on an open-entry and open-exit basis. Each Job Corps center offers training in several vocations, typically including business and clerical, health, construction, culinary arts, and building and apartment maintenance. National labor and business organizations provide vocational training at many centers.

Residential Living. Residential living is the component that distinguishes Job Corps from other publicly funded employment and training programs. The idea behind residential living is that, because most participants come from disadvantaged environments, they require new and more

supportive surroundings to derive the maximum benefits from education and vocational training. All students must participate in formal social skills training. The residential living component also includes meals, dormitory life, entertainment, sports and recreation, center government, center maintenance, and other related activities. Historically, regulations had limited the number of nonresidential students to 10 percent, but JTPA amendments raised that limit to 20 percent in July 1993.

Health Care and Education. Job Corps centers offer comprehensive health services to both residential and nonresidential students. Services include medical examinations and treatment; biochemical tests for drug use, sexually transmitted diseases, and pregnancy; immunizations; dental examinations and treatment; counseling for emotional and other mental health problems; and instruction in basic hygiene, preventive medicine, and self-care.

Counseling and Other Ancillary Services. Job Corps centers provide counselors and residential advisers. These staff help students plan their educational and vocational curricula, offer motivation, and create a supportive environment. Support services are also provided during recruitment, placement, and the transition to regular life and jobs.

3. Placement

The final step in the Job Corps program is placement, which helps students find jobs in training-related occupations with prospects for long-term employment and advancement. Placement contractors may be state employment offices or private contractors, and sometimes the centers themselves perform placement activities. Placement agencies help students find jobs by providing assistance with interviewing and resume writing and services for job development and referral. They

are also responsible for distributing the readjustment allowance, a stipend students receive after leaving Job Corps.

B. OVERVIEW OF THE NATIONAL JOB CORPS STUDY

The study addresses five major research questions:

- 1. How effective is Job Corps overall at improving the employability of disadvantaged youth?
- 2. Is Job Corps more effective or less effective for certain segments of the eligible population?
- 3. What is the Job Corps program "model," and how is this model implemented in practice?
- 4. What components of Job Corps (such as residential and nonresidential services and contract centers and CCCs) are particularly effective?
- 5. Is Job Corps cost-effective?

To address these questions, the study consists of an impact analysis, a process analysis, and a benefit-cost analysis. In this section, we briefly describe the impact and benefit-cost analyses as context for discussing the objectives and design of the process study.

1. Impact Analysis

The purpose of the impact analysis is to estimate the net effect of Job Corps on participants' post-program earnings and other employment-related outcomes (question 1). To address this objective, we created a control group by randomly selecting, between November 1994 and February 1996, approximately 6,000 Job Corps-eligible applicants who resided in the contiguous 48 states and the District of Columbia and who had not previously attended Job Corps. For three years, control group members are not permitted to enroll in Job Corps, although they are able to enroll in other programs available to them. The control sample was selected from among all new, eligible

applicants nationwide. During the same 16-month period, about 9,500 eligible applicants assigned to Job Corps were selected for the research sample as members of the program group.

The impact study will examine five outcome measures: (1) employment and earnings; (2) education and training; (3) dependence on welfare and other public transfers; (4) antisocial behavior, such as arrests, crimes committed by and against sample members, and alcohol and drug use; and (5) family formation and childbearing. We will obtain data on outcomes from interviews conducted with sample members at intake (as soon as possible after random assignment), and at 12, 30, and 48 months after intake. Interviews will be conducted by telephone, with in-person followup of sample members who could not be interviewed by telephone. We will also use data on earnings employers report for Unemployment Insurance and Social Security.

To address the second research question, we will estimate impacts for subgroups of youths, defined by the following characteristics (measured at the time of application): age, gender, educational attainment, parental status, employment experiences, participation in welfare programs, and previous involvement with the law.

To estimate the impacts of the Job Corps residential component (question 4), we will compare the experiences of program and control group youth who, before random assignment, were expected to be assigned to a residential slot. We will do the same for the nonresidential component. Variations in net impacts according to center attributes (for example, CCC or contract center, measured performance, and center size) will be obtained in a similar manner. Measurements of the impacts of other components (for example, specific occupational training courses and duration of stay in Job Corps) will rely on statistical models of the process by which students are assigned to these components.

2. Benefit-Cost Analysis

The primary purpose of the benefit-cost analysis is to assess whether the benefits of Job Corps justify the substantial investment of public resources. The benefit-cost analysis provides a unified, consistent framework for weighing the many potential benefits and costs of the program, including those that cannot be measured in dollars. By examining costs from the perspective of participants, nonparticipants, and the government, as well as from that of society as a whole, the analysis provides information about how the benefits of Job Corps and its costs are distributed.

The most important benefits that will be valued are:

- Increased output that may result from the additional employment and productivity of youth who have participated in Job Corps
- Increased output produced by the youth while in Job Corps
- Reduced criminal activity
- Reduced use of other services and programs, including welfare and other education and training programs

Other benefits to society that are difficult to appraise monetarily include improvements in participants' quality of life, self-esteem, health, and social skills, as well as reduction in crimes committed against participants. These benefits will be considered qualitatively.

The most important costs of Job Corps include the following:

- Program operating costs
- Opportunity cost of attending Job Corps (primarily the earnings forgone while the student attends Job Corps)

C. OBJECTIVES OF THE PROCESS ANALYSIS

The research question concerning the Job Corps model and its implementation establishes three objectives for the process analysis component of the evaluation:

- 1. To document the nature of the Job Corps program model, describe the important program elements, and show how these elements are designed to achieve overall program goals
- 2. To assess implementation of the Job Corps program model and to determine which program elements work well and which create operational bottlenecks
- 3. To identify important variations across centers and agencies in program elements that could affect student outcomes

As indicated earlier, the key elements of the program model are OA, Job Corps center operations, and placement. OA maintains a flow of youths who are eligible for and can benefit from Job Corps. Center operations, the cornerstone of the program model, include key program elements related to academic education, vocational training, residential living, health services, termination/placement services, and administration/management. Placement activities assist participants in finding jobs and returning to their communities. These program elements are generally under the purview of the Job Corps National Office, a regional office, or one of three other organizations that operate the Job Corps program: (1) OA contractors, (2) Job Corps center contractors, or (3) placement contractors.

Describing the Job Corps program model and assessing its implementation are critical to the overall evaluation. They support the impact and benefit-cost studies and contribute to insights that can improve education and training programs for disadvantaged youths. In particular, if the net impact and benefit-cost analyses show that Job Corps produces significant improvements in employment and related outcomes and is cost-effective, policymakers and the public will want to

know why the program was successful. Similarly, if the impact study finds that Job Corps produces little or no benefit for participants, researchers will need to offer explanations. For example, if the population served was able to do well without Job Corps, was it because weaknesses in the program model caused it to fail to meet its objective, or was it because current implementation is weak? Whether impact findings are positive or negative, the process analysis will play a critical role in explaining them. The process study also will help program managers refine the Job Corps model and develop from it other programs for at-risk youths.

Identifying variations across agencies and centers in program elements that could affect student outcomes will play a significant role in the component and subgroup impact analyses. For example, data on the amount and types of information that screeners provide to Job Corps applicants will help us determine whether variations in the information affect the impact that Job Corps has on enrollees. Analysis of the impact of Job Corps on enrollees with different durations of stay in the program will use the data on various center characteristics, including recreational activities and other aspects of center life. In particular, the data collected will help us to determine whether observed variations in OA practices, center characteristics, and placement activities affect key student outcomes, such as enrollment, vocational choices, retention in the program, and post-program behaviors.

D. DESIGN AND DATA SOURCES FOR THE PROCESS ANALYSIS

To meet the objectives of the process analysis, we undertook four data collection activities:

- 1. A telephone survey of a large sample of OA counselors nationwide
- 2. In-depth site visits to a sample of 23 Job Corps centers and interviews with managers of OA and placement agencies that serve these centers³

³The design also included visits with staff in each regional office to gain understanding of the role of the regional office and of the contextual environment in each region. Information from these (continued...)

- 3. A mail survey of Job Corps centers
- 4. Extraction of data from automated Job Corps administrative records on student characteristics and program experiences

1. Telephone Survey of OA Counselors

The telephone survey of OA counselors collected data for four purposes:

- 1. To provide a comprehensive understanding of the practices OA counselors follow in recruiting and screening students for Job Corps
- 2. To document how implementation of strict zero tolerance policies related to drugs, alcohol, and violence in early 1995 affected the recruitment and screening process
- 3. To identify any effects of random selection on the OA process
- 4. To develop variables for the subgroup impact analysis that will assess whether specific OA practices affect either the likelihood that eligible applicants enroll in, and stay in, Job Corps or the net impacts of the program

The OA telephone survey included all OA agency offices nationwide that were operating during that period of intake for the impact evaluation. In November 1995, we identified 556 distinct OA offices that recruited program or control group members for the National Job Corps Study. Since these offices represented approximately 1,000 OA counselors, we then randomly selected one program member from each office and included in the survey sample the OA counselor who recruited that youth. Telephone interviews were conducted from Battelle between December 1995 and March 1996. We completed interviews with 463 OA counselors, who accounted for 536 of the 556 sampled office identification codes.⁴

³(...continued) visits provided confirmation of general Job Corps policies and procedures. Additional insights concerning operational issues are incorporated into the discussion in the appropriate chapters.

⁴Only 463 interviews were completed for 536 unique office identification codes, because some (continued...)

2. Center Visits and Interviews with Linked OA and Placement Agencies

Center visits were conducted by two-person teams who remained at the center for three to five days. Data were collected through (1) interviews with the center director, senior management staff, academic teachers, vocational instructors, counselors, residential advisers, recreation staff, and health services staff; (2) focus group meetings with center staff and with students at different stages of the program; (3) observations of center activities, such as arrival of new students, orientation sessions, academic classes, vocational classes, social skills training sessions, Progress/Performance Evaluation Panels (P/PEP), student government meetings, center review boards, and center staff meetings; (4) value of output studies; and (5) administration of cost data protocols for the benefit-cost analysis.⁵ Center visits were conducted throughout 1996 and one visit was conducted in January 1997.

Centers were selected for site visits through stratified random sampling.⁶ Centers were separated into three groups based on the type of center contractor and the extent to which the center serves nonresidential students:

⁴(...continued)

OA counselors work in multiple office locations. In this circumstance, we asked questions concerning specific recruitment areas multiple times, but other questions only once (see Appendix A).

⁵For additional information on the design and implementation of the data collection plan for the value of output component of the site visit, see McConnell (1998).

⁶All centers in the contiguous 48 states that were included in the impact study were candidates. As with the impact study, we excluded centers in Alaska, Hawaii, and Puerto Rico, as well as two centers that operated substantially modified programs, Independence and Pivot Job Corps Centers. We also excluded New Orleans JCC and Shreveport JCC beause major construction activity was going on during the data collection period.

- 1. CCCs
- 2. Predominantly residential Job Corps centers operated by private contractors
- 3. Job Corps centers that are operated by private contractors and that serve a significant number of nonresidential students

We classified a center as serving a significant number of nonresidential students if its nonresidential capacity is more than 20 percent of its total capacity. We then allocated the number of site visits to each of the three strata roughly in proportion to the total capacity of each category and used a systematic random sampling procedure to ensure variation in key center characteristics (performance level and size).

To obtain a broader picture of the 23 centers selected for the intensive site visits, we obtained information from OA and placement agencies that serve students from them. For each center selected for a visit, we randomly selected for interview both an OA agency and a linked placement agency. (We selected the agency that recruited a randomly chosen student and the agency that placed another randomly chosen student). We interviewed the OA office manager and the placement contractor office manager, since they are most likely to be familiar both with staff practices at the operational level and with agencywide policies and initiatives.

3. Mail Survey of Job Corps Centers

The mail survey of all Job Corps centers supplemented the detailed qualitative information obtained from the center site visits with summary information about all Job Corps centers. The data collected through this survey provide comparable measures of key center characteristics that will be used in the subgroup and component impact analysis. In particular, the mail survey was designed to collect as much detail as possible on center characteristics that are likely to affect whether a

student arrives on center, as well as a student's length of stay, vocational choices, and vocational completion.

The mail survey was distributed during the last quarter of 1995 to directors of all 110 Job Corps centers--including those in Alaska, Hawaii, and Puerto Rico. All center directors completed the mail survey.

E. KEY JOB CORPS POLICY CHANGES DURING THE STUDY

In response to congressional concerns about the operation of the Job Corps program, new policies were instituted in March 1995, which was during the sample intake period for the National Job Corps Study. According to a policy instruction issued by the director of Job Corps to all centers and OA agencies on February 28, 1995, recent oversight hearings held by the Senate Labor and Human Resources Committee had indicated unacceptable levels of violence and drug abuse on certain Job Corps centers. A new zero-tolerance (ZT) policy was instituted to ensure full and consistent implementation of existing policies for violence and drugs. According to the new ZT policy, students accused of specific acts of violence (possession of a weapon, assault, sexual assault, robbery and extortion, arson, or arrest for a felony) were to be removed from the center immediately and terminated from the program if fact-finding established that they had committed the alleged acts. The ZT policy for drugs calls for the same procedures to be followed for students accused of possession or sale of drugs on center or conviction of a drug offense. In addition, all new students are tested upon enrollment in Job Corps, and those who test positive are given 30 days to become drug free. Even after the 30-day period, all students are subject to testing on suspicion of drug use. Students who are found not to be drug free after the 30-day probationary period are removed from center and terminated from the program. The 30-day probationary period was subsequently extended

to 45 days. All applicants must be informed of the ZT policies and sign an agreement to abide by them.

The main new elements of the policies were the rapid removal of offending students and the elimination of any discretion of staff regarding termination. At the time they were implemented, the policies were expected to have far-reaching effects on outreach and admissions and the quality of life on centers. In the short term, the policy changes caused some disruptions to the flow of students into the program and reduced capacity utilization. The effects of the new ZT policies on center operations are described in this report.